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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,227	03/01/2005	Takakazu Miyahara	122462	6780
25944	7590	10/31/2005	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			SCRUGGS, ROBERT J	
			ART UNIT	PAPER NUMBER
			3723	

DATE MAILED: 10/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/526,227

Applicant(s)

MIYAHARA ET AL.

Examiner

Robert Scruggs

Art Unit

3723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) none is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 March 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 01 March 2005.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Drawings*

1. Figures 1-4 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art in view of Kessel (6746311). The applicant's admitted prior art discloses an apparatus for polishing an optical disk comprising, a rotatable polished body holder for holding a polished body, a rotatable polishing body holder for holding a polishing body, driver for rotationally driving the polishing body holder and/or the polished body holder, and a pressing unit for pressing the polishing body holder and the

polished body holder against each other with the predetermined contact pressure (Figures 2-4), but lacks, a buffer member located between the polishing body and the polishing body holder which is deformable within a range of 0.05 to 0.3 mm when pressed with a predetermined contact pressure required for polishing, and a rigid member located between the buffer member and the polishing body holder. However, Kessel teaches of constructing a multi-layered polishing body (30) comprising, a sub-pad assembly (36) made of a resilient material (formed as a buffer member) located between said polishing body and a polishing body holder (38) and also said sub-pad can be made of a rigid member located between said resilient material (buffer member) and said polishing body holder (Figures 1-6) (Column 3, Lines 31-42). Regarding the deformable range values of the buffer member, Kessel teaches that a rigid element has a higher elastic modulus than a resilient element (buffer member), wherein the resilient element is used for supporting the rigid element by elastically deforming in compression. Furthermore, Kessel incorporates Rutherford et al. (5692950) by reference in which Rutherford et al. teaches of using different materials, one being urethane, each having a different elastic modulus to compose a resilient member (buffer member). The material selected depends upon the type of elastic modulus desired for polishing an object. The applicant's disclosed deformable range values of the resilient member (buffer member) ranging from 0.05 to 0.3 mm and 0.1 to 0.2 mm would be met depending upon the type of material selected for polishing an object, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re*

*Aller*, 105 USPQ 233. It would have been obvious to one having ordinary skill in the art at the time invention was made to combine the applicant's admitted prior art with, a multi-layered polishing body comprising, a sub-pad assembly made of a resilient material (buffer member) made of urethane located between said polishing body and a polishing body holder and also a rigid member located between said resilient material (buffer member) and said polishing body holder, in view of Kessel, in order provide an optical polishing apparatus that equally distributes pressure when polishing an optical object.

#### ***Conclusion***

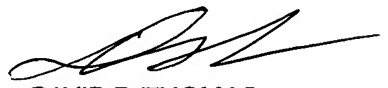
4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nishio (5921853) discloses an apparatus for polishing an object comprising of a pressing unit and a table where both contain driving members for rotating an object to be polished, and where said pressing unit contains a polishing pad operation for polishing an object. Ueno (6517423) discloses a polishing device containing a multi-layered polishing pad. Eppert et al. (6561891) discloses a multi-layered polishing device in which a polishing pad includes a "buffer member" that is made from a urethane material.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Scruggs whose telephone number is 571-272-8682. The examiner can normally be reached on Monday-Friday, 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on 571-272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RS



DAVID B. THOMAS  
PRIMARY EXAMINER